

# NASA ACADEMY PROFILE BOOK 2006

University Programs Office, Mail Code 602 NASA Goddard Space Flight Center Greenbelt, MD 20771 http://academy.gsfc.nasa.gov/2006/

# 2006 NASA ACADEMY AT THE GODDARD SPACE FLIGHT CENTER



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# **Program Description**



The NASA Academy is an intensive summer leadership program of higher learning for college undergraduate and graduate students interested in pursuing professional careers in space-related fields.

Designed to present a comprehensive package of information and experiences about NASA, the NASA Academy exposes its students (Research Associates, or RA's) to the agency's most important current and planned science, engineering, education, and technology enterprises. It also offers training in non-technical areas such as: management, budgeting, safety, personnel and career development, leadership, space law and international cooperation. Besides attending lectures and workshops, RA's are involved in supervised research in GSFC laboratories and participate in visits to NASA Headquarters, various NASA Centers and facilities, the Applied Physics Laboratory, and other space-related academic laboratories and industries.

# Eligibility, Selection Criteria, and Placement

The 20 participants in the 2006 NASA Goddard Academy have been selected from a high competitive pool of students representing 41 states in the continental US, Canada and France. Selection was based on the following criteria:

- academic rank (undergraduate junior second year graduate students)
- academic performance (minimum 3.0 GPA)
- demonstrated interest in space
- demonstrated leadership
- research and/or project experience
- maturity
- recommendations
- citizenship or permanent residence for US applicants

Both the selection process and placement of Academy participants in Goddard's research groups were assisted by recommendations from faculty, administrators, academic supervisors and the applicants' self-profiling essays.



# A Brief History of the NASA Academy

The NASA Academy was founded in 1993 (as the "NASA Space Academy") at the Goddard Space Flight Center by Gerald (Jerry) Soffen, former Mars Viking project scientist, architect of the NASA Astrobiology program, and first Director of the Goddard Office of University Programs. Jerry was an

"To give possible 'leaders' a view into how NASA, the university community, and the private sector function, set their priorities, and contribute to the success of the aerospace program."

Gerald Soffen, Founder (1926-2000)

accomplished scientist and dedicated educator. He took advantage of the unusual opportunities presented to him during his career and realized the importance of mentoring in the life of young professionals. In his vision, the Academy was intended to exceed in purpose and content all other internships by familiarizing its participants with as many facets of NASA as possible. With his dynamic personality and unique leadership, he opened many gateways and defined a new standard of excellence.

As the reputation of the Goddard Academy widened, new NASA Academy Programs were started at Marshall Space Flight Center (1994), Ames Research Center (1997), and Dryden Flight Research Center (1997). The name of the program changed from "NASA Space Academy" to "NASA Academy" at specific NASA Centers. A continuous effort is being made to establish or re-establish Academies at various Centers, with different profiles and focus areas. In 2006, NASA Academies will take place at Goddard, Glenn and Marshall.

There have been several international participants in the NASA Academy from England, Canada, Italy and France. The 2006 hosts one Canadian and one French student.

Jerry Soffen died on November 22, 2000. We honor his legacy by continuing the Academy program he loved so well. In 2002, the NASA Academy celebrated ten years of successful activity. To date, 469 participants have graduated from the program.



# University of Michigan

Ann Arbor, Michigan Astronomy & Astrophysics, General Physics Bachelor of Science, April 2006

Email: RyanA1084@gmail.com



# **NASA Academy Research Project:**

In-Situ Oxygen from the Lunar Regolith Principal Investigator: Eric Cardiff, Code 597

#### **Academic and Research Experience**

- University of Michigan Ann Arbor, MI, Aug 2002 April 2006
   Bachelor of Science, Astronomy & Astrophysics, April 2006;
   Bachelor of Science, General Physics, April 2006
- University of Michigan, Senior Honors Thesis
  Simulation of a Low-Resource GCxGC Instrument with Planetary
  Science and Other Applications
- Lunar and Planetary Institute Houston, TX, June 2005 -- Aug 2005

Morphometry of Large Martian Impact Structures and Implications for Resurfacing Processes on Mars (presented at the Lunar and Planetary Science Conference, March 2006)

- Harvard/Smithsonian Center for Astrophysics Cambridge, MA, June 2004 August 2004
  - Mapping Molecular Clouds using *Spitzer*'s InfraRed Array Camera (presented at the conference of the American Astronomical Society, Jan 2005)
- University of Michigan, Undergraduate Research Opportunity Program, Sept 2003 – April 2004

Optical Spectroscopy of a Flare on Barnard's Star (published in The Publications of the Astronomical Society of the Pacific, Feb 2006)

#### **Work Experience**

• Teacher and Equipment Manager for Mad Science, Inc. – Hands-On Science Summer Camp, May 2003 – Aug 2003

#### **Memberships and Activities**

 University of Michigan Student Astronomical Society, President, April 2005 – April 2006, Vice President, April 2004 – April 2005, Active Member, Sept 2004 – April 2004

- University of Michigan Society of Physics Students, Active Member, Sept 2005 – April 2006
- Michigan Daily Science Writer, March 2005 Dec 2005
- American Astronomical Society, Member, Dec 2004 present

- Computer Skills: Microsoft Office, HTML, IDL, limited C++, limited LaTeX, comfortable with Windows, Mac, Unix/Linux
- Language Skills: 3 years of high school Spanish
- PADI Open Water Scuba Certified

#### **Honors and Awards**

- Sigma Pi Sigma national physics honor society
- National Dean's List

#### **Hobbies and Interests**

Reading, Writing, Hiking, Skiing, the Internet, Watching movies, Science in general, Physics and Astronomy in particular

#### **Personal Statement**

I grew up in Farmington Hills, Michigan, and have been interested in science for as long as I can remember. In high school I took an astronomy class as an elective. We were given a project: to design a manned mission to colonize one of the planets or moons in the solar system. As I worked on the project, I realized that I wanted to become a planetary scientist and be involved in the exploration of our solar system. I double-majored in Astronomy and Physics at the University of Michigan, and will be starting graduate school in Astronomy and Space Sciences at Cornell University in Fall 2006. I plan to eventually be involved in planetary missions, either manned or unmanned. I am also very interested in teaching and science outreach, and would like to be a professor, or be involved somehow in getting the public interested in science.



# **University of Colorado**

Boulder, CO

Aerospace Engineering Master of Science, May 2007

Email: daniel.baca@colorado.edu



# **NASA Academy Research Project:**

Optical Design Tools for Rapid Concept Development Principal Investigator: Joseph M. Howard, Code 551

#### **Academic and Research Experience**

- *University of Montana Missoula, MT, Sep 2000-May 03*Bachelor of Arts: Physics/Astronomy and Mathematics, May 2003
- Flathead Valley Community College Kalispell, MT, Sep 97-May 00 Associate of Arts and of Science: General Studies, May 2000
- Volunteer Lab Assistant-University of Montana
  Tested oscilloscopes, turbo pumps and leak detector. Developed

requirements for mass spectrometer electromagnet and power supply, contacting companies worldwide for manufacturing bids. Researched materials to construct safe ion source isolation bench.

Project Manager-University of Colorado
 Led team in Phase A study of mission to Neptune during Spacecraft Design course.

#### **Work Experience**

- Teaching Assistant-Dept of Aerospace Engineering-University of Colorado, 2005-06
- City of Kalispell Parks and Recreation, Summer 2005
- CRS Hardware Corporation, 2000-2005
  - -Assistant Store Manager In addition to Supervisor duties, managed inventory, employee scheduling and increased productivity.
  - **-Training Coordinator** Devised training program for various positions; trained new hires for entire company (~250 employees).
  - **-Supervisor** Responsible for opening/closing business, delegating tasks, and dealing with unforeseen circumstances.
- Cornerstone Construction, 1999

Constructed commercial and residential projects. Built clubhouses to raise funds for local non-profit organization.

#### **Memberships and Activities**

• CU Jujitsu Club president, founder, & volunteer instructor.

- CJA-National Jujitsu Organization-Executive Manager, 98-2004
- AIAA-Active member and volunteer.
- Society of Hispanic Engineering Professionals-Member & Volunteer.
- SEDS-Treasurer, Outreach, and Yuri's Night planner for CU chapter.

- Programming Languages: Java, C++, HTML, Visual Basic, Assembly
- Software/OS: MatLab, Labview, Mac OSX, Windows(3.1-XP), Unix, Linux, MS Office, Photoshop, Illustrator, Dreamweaver, Final Cut Pro HD, Soundtrack, Quicktime Pro, Bryce 5
- Language Skills: Spanish Some Reading/Writing/Speaking
- American Red Cross Certified Instructor for First Aid, CPR, and AED
- Certified Massage Therapist
- Certified in Oriental Bone Setting/Joint Relocation & Athletic Taping
- Certified Danzan Ryu Jujitsu Instructor

#### **Honors and Awards**

- Teaching Assistantship-CU, 2005-06
- University Graduate Fellowship 2005-06
- Fox Foundation Scholarship, 2002-03
- Coombs Award for Heroism, 2001-02
- College of Arts & Sciences Scholar, 2001-02
- Tom Cotter Scholarship, 2000-01
- Board of Regents Scholarship, 2000-01
- Social Science Division Scholarship, 1999
- FVCC Foundation Scholarship, 1999
- Flathead Valley Credit Professionals Scholarship, 1999
- Shin Mei Kan Outstanding Service Award, 1997

#### **Hobbies and Interests**

Biking, Billiards, Cooking, Music, Drawing, Hiking, Martial Arts, Massage, Film, Soccer, Teaching, and of course, Space Exploration.

#### **Personal Statement**

I was born in a small port town in what was West Germany while my father was in the US Air Force. I have a life-long passion for space science and exploration. As a youth, it wasn't uncommon to see me staring up at the Montana "Big Sky" explaining space phenomena to friends and family. While western Montana afforded me many opportunities, if I wanted to get involved in aerospace, I would have to leave the state. I volunteered for the Space Foundation's National Space Symposium, where I met Dr. Buzz Aldrin. This further stoked my passion for Space and prompted me to investigate Masters programs. Now at the University of Colorado, I am currently getting closer to doing what I have always dreamed: advance the human exploration of space.



# University of Southern California

Los Angeles, CA Mechanical Engineering Bachelor of Science, May 2008

Email: Dcalvo@usc.edu



# **NASA Academy Research Project:**

A Micro-fabricated Hematology Analyzer Principal Investigator: Patrick Kilroy, Code 568.0

#### **Academic Experience**

• University of Southern California – Los Angeles, CA, Aug 2004 – Present

# **Work Experience**

• NASA Robotics Academy at Goddard, Modeling of Tetrahedral-Based Robotic Structures

#### **Memberships and Activities**

- American Society of Mechanical Engineers
- BeoBot Autonomous Underwater Vehicle Competition
- Treasurer of NASA Robotics Academy Alumni Association
- Mentor for FIRST robotics
- USC Rugby
- USC Ultimate Frisbee
- Relay for Life participant
- Swim with Mike participant

#### **Skills and Certifications**

- Computer Skills: Microsoft Office, C, C++, VB, Java, Python, VPython, Solid Edge, Solid Works, Ideas, 3D Studio Max, Maya, Adobe Illustrator and Photoshop
- **Machine Shop Skills**: Mill, Drill Press, Lathe, as well as all basic hand tools.
- PADI Scuba Certification Open water diver

#### **Honors and Awards**

USC Dean's Scholar

#### **Hobbies and Interests**

I spent the large part of my high school career building robots for the FIRST competition, which quickly became an all encompassing passion.

My friends and I spent much of our free time building different robots, or just putting microchips on old broken remote control cars. I now devote a lot of my time to learning how to program different types of chips so that I can apply my computer science knowledge to my Mechanical Engineering degree. I try to spend a lot of my time on the internet learning how to use computers and how to program better so that I can write software for various online open source projects. However, I decided that I couldn't spend all my time indoors so I play on my college's club Rugby and Ultimate Frisbee teams and frequently play ultimate Frisbee with my friends. I spend what little time remains reading science fiction, or anything written by Brian Greene, and just enjoying college life.

#### **Personal Statement**

"For me, engineering was always the discipline that could turn the dream of destroying my mother's rose garden, using a remote control car, into a reality. Though my first introduction to engineering was through Legos and Lincoln Logs, it was not until the FIRST Robotics Competition that I began to fully understand the power of engineering. I was raised to be a doctor, or at least a scientist, and because of this, I decided to invest my time studying related fields. However, I soon discovered that without a tangible application, I quickly lost interest in what I was doing. During my sophomore year of high school, I joined a few of my friends and my chemistry teacher to start the Athenian Robotics Collective to compete in the local FIRST competition. The challenges of the program gave me an outlet for what I had been learning in my science classes, and most importantly, showed me that what I was studying in school actually pertained to real world situations. I soon decided that I would pursue the field of engineering as a career, specifically Mechanical Engineering, because it is the most tangible and the most interesting to me. Last summer, my Goddard robotics internship cemented my love of the mechanical engineering field through the challenges of designing mechanical components for a large-scale project. Also, the integration of my love for design with a state-of-the-art project, on the forefront of space technology, is a dream come true. I see my experience at NASA as working towards my ultimate goal of designing mechanical systems that will open up space for human and robotic exploration."



# The Pennsylvania State University

University Park, PA Aerospace Engineering Bachelor of Science, May 2006

Email: bld175@psu.edu



# **NASA Academy Research Project:**

Spacecraft Mission Operations

Principal Investigator: Richard Reynolds, Code 590

#### **Academic & Research Experience**

- The Pennsylvania State University University Park, PA, Sep 2002 May 2006
- Research: Use of sandwich composite deckplates on sounding rockets.

#### **Work Experience**

- NASA Goddard Space & Flight Center Greenbelt, Maryland, Summer 2005
  - Intern working on systems engineering for the James Webb Space Telescope with SGT Inc
- Sensis Corporation- Syracuse, New York, Summer 2004
  Intern working on air traffic control surveillance using multilateration
- Theatrical Production, Manlius, New York, Summer 2003
  Technical Director for community musical production

#### **Publications**

 Design and flight data comparison of aluminum and sandwich composite sounding rocket deckplates, B. Davis, B. Pomeroy.
 Presented at the 17th ESA Symposium on European Rocket & Balloon Programmes and Related Research Conference. Sandefjord, Norway, June 2005

- Structures Team Leader of the SPIRIT III student sounding rocket payload, 2004-2006
- American Institute of Aeronautics and Astronautics (AIAA), Penn State Chapter Vice President, 2006
- Conference Organizing Committee for AIAA Mid-Atlantic Regional Conference, April 2006

- University Park Allocations Committee, elected by student body of Penn State, 2003-2004
- Penn State Crew Team (club sport), varsity rower, 2002-2004
- Penn State Professional Theatre Stage Crew 2002-2004
- Penn State Residence Life Orientation Leader, 2003
- Community Service: 100+ hours, Alterra Clare Bridge Alzheimer's Home, Fayetteville, NY

- Machine Shop Certification at Penn State
- Software: Solidworks Modeling, DOORS, Microsoft Office, Matlab, Macromedia

#### **Honors and Awards**

- Deans List
- Invited to Dad Vail National Crew Regatta in Philadelphia, May 2004
- Certificate of Appreciation from Penn State student affairs for student service May 2005

#### **Hobbies and Interests**

Skiing, Sailing, Crew, Running, Frisbee, Lego Construction, Penn State Football, Technical Theatre

#### Personal Statement

As a child, the movie Apollo 13 filled me with interest and a desire to be a part of the NASA team. The story is an excellent example of what can be accomplished with teamwork and strong leadership which are traits I constantly challenge myself to improve on. I have been involved with NASA by working as the structures team leader of the SPIRIT III sounding rocket project at Penn State. SPIRIT is an undergraduate student run project challenged with the goal to build a ten meter long rocket containing scientific experiments. The task has opened my eyes as to what a real world NASA mission is like and has shaped me as a leader of twenty undergraduate students to design, fabricate and test the mechanisms of the payload. This fall, I am looking forward to becoming a graduate student with a focus of performing research within aerospace structures.



# University of Minnesota

Minneapolis, MN Aerospace Engineering and Mechanics Master of Science, December 2006

Email: dema0021@umn.edu



# **NASA Academy Research Project:**

Astrodynamics Analysis

Principal Investigator: David Folta, Code 595.0

#### **Academic and Research Experience**

- *University of Minnesota Minneapolis, MN, Sept 2005 Present*Master of Science, Aerospace Engineering and Mechanics, Dec 2006
- University of Minnesota Minneapolis, MN, Sept 2001 May 2005
   Bachelor of Science, Aerospace Engineering and Mechanics, May 2005
- NASA Reduced Gravity Student Flight Opportunities Program
- Undergraduate Research Assistant, University of Minnesota, Department of Aerospace Engineering and Mechanics

#### **Work Experience**

- Intern NASA Jet Propulsion Lab
- Teaching Assistant, University of Minnesota, Department of Aerospace Engineering and Mechanics
- Privately contracted figure skating instructor, 2001 2005
- Learn to Skate Instructor, City of Burnsville, MN, 1999 -- 2005

#### **Memberships and Activities**

- Member, University of Minnesota Aerospace Engineering and Mechanics 2004-2005 Student Advisory Board
- Officer, American Institute of Aeronautics and Astronautics University of Minnesota-Twin Cities Student Chapter, 2004 – Present
- Member, Tau Beta Pi National Engineering Honor Society, 2004 Present
- Member, Society of Women Engineers, 2002 Present
- Member, United States Figure Skating Association, 1993 Present

#### **Skills and Certifications**

Computer Skills: All Windows OS, Linux (Suse, Debian, Red Hat),
 DOS, Solaris, Matlab, Simulink, Solidworks, C++, Dynamic C, Visual Basic, Ansys, Mathematica, Microsoft Products

Ice Dancer

#### **Honors and Awards**

- Dean's List
- Minnesota Space Grant Consortium Scholarship
- Iron Range Scholarship, May 2001

#### **Hobbies and Interests**

Ice dancing, classical guitar, cross country skiing, hiking and backpacking, backyard astronomy, reading novels.

#### **Personal Statement**

It wasn't until my sophomore year in college, when a professor posed the question: "What is the lift-to-drag ratio of the space shuttle?" in the introductory flight mechanics class that I knew aerospace engineering was right for me. However, before that, I knew that my interests were in scientific fields beginning in the second grade. In eighth grade, after writing a report about Stephen Hawking, I decided that I wanted to be an astrophysicist or a cosmologist. In my sophomore year, I discovered that I could unite my passion for space science with my interest in new technologies as an aerospace engineer.



## **Worcester Polytechnic Institute**

Worcester, MA
Mechanical/Aerospace Engineering and Physics
Bachelors of Science, May 2008
Email: cdickson@wpi.edu



# **NASA Academy Research Project:**

MEMS Colloidal Thruster

Principal Investigator: Eric H. Cardiff, Code 597

#### **Academic and Research Experience**

- Worcester Polytechnic Institute Worcester, MA, August 2004 -Present
- Research Assistant, WPI, Colloid Thruster Lab, May 2005 Present
- High School Internship (HIP), NASA Goddard Space Flight Center, Code 662 (Laboratory for High Energy Astrophysics, Project Constellation X, September - December 2003
- Howard County Community College Columbia, MD, Summer High School Advanced Classes, June-August, 2001, 2002, and 2003

#### **Work Experience**

- Intern, Autofab Race Cars, Elkridge, MD, Summer 2005
- WPI Study Lab Monitor, 2004-2005
- Engineering Intern, National Ready-Mixed Concrete Association, Summer 2004

#### **Conference Publication**

 J. Blandino, M. Dickson, T. Roy, M. Gamero-Costaño. Emissive Probe Measurements in Colloid Thruster Plumes, to be presented at the 42<sup>nd</sup> AIAA/ASME/SAE/ASEE Joint Propulsion Conference & Exhibit, July 9-12, 2006, Sacramento, CA

- Co-Founder and Vice President of WPI's DARPA Grand Challenge Team, now known as Autonomous Robotics Initiative (ARI). This club is 100% student run, 2004-Present
- American Institute of Aeronautics and Astronautics, 2005-Present
- Society of Physics Students, 2005-Present

- American Concrete Institute: Concrete Field Testing Technician, Grade I certification, 2004
- Computer Skills: Windows, Macintosh, MATLAB, FEMLAB, Microsoft Office, LabVIEW, Pro Engineer and AutoCAD, GibbsCam, Maple
- TIG and MIG Welder (uncertified)
- Machine Shop Experience

#### **Honors and Awards**

- WPI Global Perspective Program: competitively won placement in WPI Australian Project Center; interdisciplinary team technical service project in Melbourne, fourth quarter, 2007
- WPI-Francis & Annabelle Bragg Scholarship Grant, 2005-2006
- Four Year Scholarship Grant: Armed Forces Communications and Electronics Association (AFCEA); 2004-2008
- WPI Four Year Scholarship Grant, 2004-2008
- Four Year Scholarship Grant: Maryland State Department of Education, Division of Rehabilitation Services, 2004-2008
- Food Allergies & Anaphylaxis Network (FAAN) Scholarship Award Recipient, 2004
- Project Manager. American Institute of Aeronautics and Astronautics with National Association of Rocketry (AIAA/NAR): "Team America Rocketry Challenge" Team made final competition both years. Outcome recognized by Society of American Military Engineers. 2003 & 2004
- Team placed 2<sup>nd</sup> at NASA's Region 9 Engineering Challenge (AQUA Challenge), 2003

#### **Hobbies and Interests**

Music, skiing, model rocketry, knitting, rock climbing, Space News, viola & banjo, MUni/ unicycling, computational fluid dynamics

#### **Personal Statement**

I have been fascinated with most things space related for as long as I can remember. I grew up just outside of Washington DC where many of my neighbors worked either at NASA, APL, NSA, or for a military contractor. Saturday sports were typically followed by Sunday rocketry trips at Goddard or to the Smithsonian National Air and Space Museum. With the opportunity in high school to intern at NASA Goddard as well as being apart of a pre-engineering tech magnet program, I knew "discovery followed by application" was my vocation. Now at WPI, research and team project-based learning reinforce my commitment to understanding the mysteries of space.



# **Dartmouth College**

Hanover, New Hampshire Earth Science Modified with Engineering Bachelor of Science, June 2007

Email: <u>Lauren.A.Edgar@Dartmouth.edu</u>



# **NASA Academy Research Project:**

**Buried Basins on Mars** 

Principal Investigator: Herbert Frey, Code 698.0

#### **Academic Experience**

• Dartmouth College - Hanover, NH, Sept 2003 - Present
Bachelor of Science, Earth Science Modified with Engineering, June 2007

#### **Work Experience**

- New Hampshire Space Grant recipient for geochemistry internship, analyzing meteorites and micrometeorites using a thermal ionizing mass spectrometer (2004-present)
- Women In Science Project internship to study micrometeorites recovered from the South Pole using a Scanning Electron Microscope (2004)
- Lifeguard and Swim Instructor (summers '03,'04)

- President ('05-'06), Secretary ('05), and charter member, Dartmouth chapter AIAA
- Participant in NASA's Reduced Gravity Student Flight Opportunities Program ('05, '06)
- Member of DARTSAT, a student-run organization working to develop a cube satellite ('04- present)
- Member of the Epsilon Chi chapter of Kappa Kappa Gamma Sorority
   VPO (summer '05), PR chair (winter '05), Education/Programming chair ('06)
- Dartmouth Outing Club Trip leader (9/04, 9/06) responsible for guiding a group of freshmen on a hiking trip prior to orientation
- Member, Dartmouth Society of Women Engineers ('03)
- Participant in American Cancer Society Relay for Life fundraiser (5/05, 5/06)
- Participant in KKG Annual Breast Cancer Walk (Spring '04, '05, '06)
- Member, Dartmouth Cheerleading Squad ('04-'05)

- Member, Poms Squad Dance team ('03-'04)
- Member, Sheba Hip-Hop Dance Group (summer '05)

- Computer Skills: Microsoft Office, Java, MATLAB, some experience with UNIX
- Language Skills: Proficient in French
- Other Skills: CPR/First Aid certified

#### **Honors and Awards**

- Awarded James H. Todd 1938 endowed scholarship for Earth Science ('05-'07)
- Awarded Jane W. and G. Edward Elsenhans 1935 endowed scholarship for Engineering and Earth Science ('05-'07)
- Awarded scholarship from the Society of Exploration Geophysicists (SEG) ('03-'07)
- Awarded scholarship from the Maxwell Foundation ('03-'07)

#### **Hobbies and Interests**

Gymnastics, cheerleading, tennis, hiking, swimming, astronomy, earth and space sciences.

#### **Personal Statement**

I have been interested in space exploration since I was in second grade, and saw the launch of the Discovery Space Shuttle. From that time, I have involved myself in activities that perpetuate my interest and continue to direct me toward a career in this field. I will graduate from Dartmouth in June, 2007 with a major in Earth Science modified with Engineering, a combination I believe will prove valuable in my future career. My goal, after completing my Masters and achieving a PhD. is to work in planetary geology, hopefully contributing to research efforts at a NASA center. My long term goal is to be selected to NASA's astronaut corps and continue to increase our presence in space and understanding of worlds beyond our own.



# Florida Institute of Technology

Melbourne, FL Space Sciences

Bachelor of Science, May 2007

Email: cgabriel@fit.edu



# **NASA Academy Research Project:**

Using the New Horizon Spacecraft as a Dust Detector Principal Investigator: Vigdor Teplitz, Code 602

#### **Academic Experience**

 Florida Institute of Technology - Melbourne, FL, Aug 2003 – Present

Bachelor of Science, Space Sciences, May 2007

#### **Work Experience**

- Undergraduate Research, solar storms and the polar cap, Florida Institute of Technology
- Physics paper grader
- Undergraduate Research, studying properties of JSC-1 and JSC Mars-1 Lunar and Martian soil simulants, Florida Institute of Technology and NASA
- Office Assistant, Physics and Space Sciences Dept., Florida Institute of Technology
- Caretaker of elderly and handicapped, Comfort Keepers

- President of the Society of Physics Students, Fall 2005—present
- Member and acting president of Sigma Pi Sigma Physics National Honor Society, Spring 2006-present
- Member of Phi Eta Sigma National Honor Society, Spring 2004 present
- Outreach Coordinator of In-situ Resource Utilization research team, Fall 2004—Spring 2005
- Member of Students for the Exploration and Development of Space, Fall 2003—present
- Member of American Physical Society
- Member of American Astronomical Society
- Vice President, Artists' Guild, Spring 2006

- Captain of Co-ed intramural softball team, the "Infrared Sox", Spring 2006
- Member of Relay for Life team, "The Space Cadets", Fall 2005— Spring 2006
- Secretary and Bible study leader of Intervarsity Christian Fellowship, member Fall 2003—present
- Staff writer for the school newspaper, *The Crimson*

- Computer Skills: Microsoft Office/XP, some programming, internet
- Simple circuitry: oscilloscopes, breadboards, signal generators, etc.
- Language Skills: English and some Spanish

#### **Honors and Awards**

- 2006 Recipient of Outstanding Junior in Space Sciences Award
- 2005 Recipient of Outstanding Sophomore in Space Sciences Award
- Dean's List, Six semesters
- SPS 2005-2006 Herbert Levy Award
- Marsh White Award, Oral Research Presentation at Society of Physics Zone Meeting, Fall 2005
- Recipient of Elks' Scholarship Award

#### **Hobbies and Interests**

Star-gazing, music (clarinet, piano, singing), acting, snowboarding, art (drawing and painting), softball, volleyball, beaching, browsing the internet, exploring, traveling, reading, writing, outdoors activities

#### **Personal Statement**

"My biggest desire in life is to make a positive difference in other people's In high school we were required to commit 20 hours to volunteer work each year, but I always went above and beyond simply because I found such enjoyment helping out at church and other volunteer organizations. When it came to choosing a career, I knew that in order to wake up excited each morning that my job would have to entail something bigger than myself; something that I felt would further humanity and positively influence people on a large scale. I've always been fascinated with stars, the planets, and space travel, which helped influence my decision to go into the field of space sciences. What better way to affect humanity than to be involved in developing new technologies and attempting to quench mankind's insatiable desire for the unknown? I have great respect for NASA and all of the people who have worked towards the exploration and development of space, and deem working for such an institution, at the cutting edge of technology and at the forefront of discovery, a high honor."



## **Mount Allison University**

Sackville, New Brunswick, Canada Honors Physics and Mathematics Bachelor of Science, June 2006

Email: kahll@mta.ca



# **NASA Academy Research Project:**

Astrodynamics Analysis

Principal Investigator: David Folta, Code 595

#### **Academic and Research Experience**

- Mount Allison University Sackville, NB, Sep 2002 May 2006
   Bachelor of Science, Honors in Physics and Mathematics, May 2006
- NSERC funded student researcher (Mount Allison University) –
   Summer of 2003, 2004, and 2005 Investigated the atmospheric
   ablation of meteoroids and studied the orbital debris environment. Five
   papers have been published in peer-reviewed journals and two others
   are currently in preparation.

#### **Work Experience**

- *Physics Education assistant (summer 2003)* Created multimedia presentations to enhance the quality of first year physics labs.
- *Teaching Assistant* (2002 2005) General Physics I, Introductory Astronomy, Calculus I and II, Electricity & Magnetism, and Multivariable Calculus.
- **Teaching Intern** (2005-2006) in General Physics I and Physics of Energy Production & Transfer. Responsibilities included lecturing, creating assignments and tests, and running help sessions.
- Tutor in Physics and Mathematics (2002 present)

- Creator, Mount Allison Undergraduate Science Research Fair (2003 2005)
- Distribution Manager, Canadian Undergraduate Physics Journal (2004 2005)
- Co-President, Mount Allison Physics Society (2003 2005)
- Lead trombone in Mount Allison Jazz Ensemble, Symphonic Band and Brass Choir (2002 2005)
- Member of SMILE, a program which seeks to improve the quality of life for disabled children in the local region through weekly interaction with them (2004 2006)

- Fundraiser, Canadian Cancer Society Relay for Life (2004 and 2005)
- Mount Allison Leadership Development Certificate (2002 2005)
- Intramural softball, soccer, and curling teams (2003 and 2004)
- Student representative on University Senate and member of three Senate committees (2005 2006)

- Computer Skills: Java, Linux, LaTeX, Microsoft Office, Maple, Dreamweaver, Photoshop
- Language Skills: Proficient in English and French

#### **Honors and Awards**

- Bell Scholarship, Mount Allison's premier entrance award (2002)
- 1st Prize, best research presentation at both the 2004 Atlantic Canada Physics & Astronomy Conference and the 2004 Canadian Undergraduate Physics Conference
- NSERC undergraduate research award for 2004 and 2005 summers
- 2005 Mount Allison Male Upperclassman of the Year as selected by Students' Administrative Council
- 3rd year Student of the Year as selected by Mount Allison University Administration (2005)
- 2nd Prize, 2005 Atlantic Canada University Mathematics Competition
- Rhodes Scholarship for graduate study at University of Oxford (2006)
- Dean's List achievement in every academic semester (2002 2006)

#### **Hobbies and Interests**

Playing music, baseball, hockey, ultimate frisbee, swing and jazz music, physics, reading, space, and most importantly: satisfying my sweet tooth.

#### **Personal Statement**

"I am not surprised that I developed a keen interest in science at a young age. As a child, I would often lie on the ground and gaze at the star-filled sky on warm summer nights. Those engaging nights gave me a love for science and astronomy that is only matched by my enthusiasm to share it with others. I am currently completing an undergraduate degree in Physics and I will begin graduate work in Planetary Physics at Oxford in Fall 2006. I am not, however, isolated to a solely academic life, for I was taught long ago that everyone has a responsibility to contribute to the world in a meaningful way. To that end, I have been involved with many humanistic organizations including Relay for Life (cancer fundraiser), SMILE (program for disabled children), and Make Poverty History (poverty awareness campaign)."



# **Massachusetts Institute of Technology**

Cambridge, Massachusetts Aeronautical/Astronautical Engineering Bachelor of Science, June 2007

Email: holschuh@mit.edu



# **NASA Academy Research Project:**

Lightweight Isothermal High Thermal Inertia Aluminum Mirror Principal Investigator: Lou Fantano, Code 545.0

#### **Academic and Research Experience**

- Massachusetts Institute of Technology (MIT) Cambridge, MA, Sep 2003 - Present
- MIT 16.62x Experimental Projects Capstone Design Laboratory –
   Cambridge, MA, Sep 2005 May 2006
   Designed, created and tested a new methodology for measuring the acoustic signature generated between a golf driver and golf ball
- MIT 16.83 MoRETA Project, Senior Capstone Design Sequence –
   Cambridge, MA, Feb 2006 May 2006
   Developed operations interfaces and terrain testing environments for a modular, extreme-terrain-capable rover prototype
- MIT Space Systems Laboratory, Research Assistant Cambridge, MA, Mar 2006 – May 2006

Designed, fabricated and assembled project hardware, and upgraded an existing position and attitude determination system to support the demonstration and expansion of the MIT SPHERES project

#### **Work Experience**

- General Electric Aircraft Engines, Engine Operability Summer Intern Lynn, MA, Jun Aug 2005

  Compiled, analyzed and reduced aircraft engine cycle model and test cell data using both GE proprietary software and database tools to assist in operability analyses for the J-UCAS X-45C Boeing prototype
- Robert J. Roberts and Associates, Summer Surveying Team Member
   Moorhead, MN, Jun Aug 2003, 2004

- Delta Tau Delta Fraternity, 2003-Present Assistant Treasurer, 2004 – 2005
- MIT Varsity Men's Ice Hockey, Defenseman, 2004 2006
- MIT Associate Advisor for the freshmen classes of 2008 2010

• MIT Undergraduate Practice Opportunities Program, Jan – Sep 2005

#### **Skills and Certifications**

- Computers: Windows OS, Microsoft Office applications, Photoshop, Adobe Pagemaker; exposure to MATLAB, Simulink, and Solidworks
- Machining: experienced with mill, drill press and band-saw operation

#### **Honors and Awards**

- GE Student Ambassador to MIT, 2005 2006
- Scholarships:
   Robert C. Byrd Minnesota Scholarship recipient, 2003 2007; SHRM Scholarship recipient, 2003 2005; Moorhead Dollars For Scholars Scholarship recipient, 2003
- Moorhead High School (MHS) Valedictorian, Class of 2003

#### **Hobbies and Interests**

Ice hockey, baseball, golf, movies, video games, wakeboarding, science fiction, modifying things that work to the point that they stop working, exploring, Star Trek, astronomy, skydiving (someday), the solar system, story-telling, camping, Taco Bell, current events, very cold weather, sleeping for inordinate amounts of time, unbiased journalism, and anything and everything related to NASA and/or space technology and exploration.

#### **Personal Statement**

"My name is Brad Holschuh, and I am a space junkie. Undoubtedly, the seeds to my obsession were planted early in my childhood. Growing up in a small, rural town on the Minnesota-North Dakota border, some of my earliest and cherished memories include me staring up at the night sky, mesmerized by its vastness and dreaming of exploring its monumental contents. A passion for such exploration has always been in my blood, and I've never considered any boundary to be un-crossable. My adventures have taken on many different forms: as a child I explored my neighborhood and many others on my trusty tricycle (much to the dread of my parents); as I grew, I frequently forged new paths in the woods at our family's lake cabin, located on an island deep in the heart of the Chippewa National Forest; and in junior high and high school my explorations spread to the academic arena, which in turn cultivated deep personal interests in everything from mathematics to science to world history to ancient mythology to journalism. Unlike many of my high school comrades, I set my college sights on distant lands and faraway places. When the time came, I decided to break the mold - I packed my bags, and set out east on route to MIT in exotic Cambridge, Massachusetts. Through my studies there I came to a stirring realization: my lofty childhood dream of exploring the cosmos was actually potentially realizable. Humans in the near future will once again cross the boundary into deep space – and upon that realization, I knew immediately that I wanted to be a part of it."



# **University of Maryland**

College, Park Maryland Aerospace Engineering Bachelor of Science, May 2006 Email: ashley.korzun@gmail.com



# **NASA Academy Research Project:**

Control System and Testing for a Second Generation Theoferometer Principal Investigator: Raymond Ohl, Code 551

#### Academic Experience

- University of Maryland College Park, MD, Sept 2002 May 2006
   Bachelor of Science, Aerospace Engineering, May 2006
- Georgia Institute of Technology Atlanta, GA, Aug 2006 Present
  Masters of Science, Aerospace Engineering, expected May 2008;
  Ph.D, Aerospace Engineering, expected May 2010

#### **Work Experience**

- Research Associate, NASA/GSFC, 2005-2006 Academic Year
- NASA Student Internship Program (SIP), Summer 2004, Summer 2005
- Clark Ambassador, Engineering Education Outreach and Recruitment, 2005-2006
- Maryland Day Project Manager, AE Dept., Mars Rover Simulation outreach, Spring 2004
- RASC-AL Design Competition, University of Maryland representative, Spring 2006
- Mentor Team Leader, Women In Engineering Program, 2003-2005

- President, Tau Beta Pi (Maryland Beta Chapter), 2004 Present
- Katrina Relief Trips, organizer for Biloxi, MS and New Orleans, LA relief trips, Winter/Spring 2006
- Sigma Gamma Tau, Aerospace Engineering Honor Society, Fall 2003
   Present
- AIAA, member, Fall 2002 Present
- Society of Women Engineers, member, Fall 2002 Present
- SPIE International Optical Engineering Society, member, Fall 2005 -Present
- Aerospace Engineering Honors Program, Fall 2003 Spring 2006

• Computer Skills: MATLAB, Visual Basic, Interactive Data Language (IDL), C++, Microsoft Office

#### **Honors and Awards**

- Recipient of the Dinah Berman Memorial Award for Leadership and Service, Spring 2005
- Dean's List, Eight semesters
- Recipient of the Kim Borsavage & Pamela J. Stone Student Award for Outstanding Service, Spring 2006
- Finalist for Byrd Citizenship and Wilson H. Elkins Awards, Spring 2006
- A. James Clark Scholar, 2005-2006
- Tau Beta Pi Eckert Award, 2005-2006
- Glenn L. Martin Scholar, 2002-2006
- AIAA Undergraduate Fellowship, 2004-2005, 2005-2006
- Alpha Omega Epsilon National Foundation Scholar, 2005-2006

#### **Hobbies and Interests**

Intramural sports with Tau Beta Pi (soccer, volleyball), running, swimming, listening to music, community service (especially trips like the Katrina Relief ones), enjoying the outdoors, spending time with friends.

#### **Personal Statement**

"I was born and raised in rural Pennsylvania, where it is still dark enough to look up at the sky and even see satellites pass overhead. My fascination with the scenery in the night sky is possibly why I have always wanted to become an astronaut. Ten years of competitive gymnastics and music shaped my life outside of school, and I credit those experiences for giving me a strong work ethic and appreciation for passion and determination. I graduated from high school at 16 and moved down to the Washington D.C. metro area to attend the University of Maryland and study aerospace engineering. I am very involved in student organizations, mentoring, and engineering outreach as a part of my studies and in my free time. After Maryland, I will be continuing my education as a doctoral student at Georgia Tech, joining the Space Systems Design Lab (SSDL). I am looking forward to another great summer working at Goddard as a part of the NASA Academy."



# Ecole Nationale Supérieure de l'Aéronautique et de l'Espace (SUPAERO)

Toulouse, France
Aeronautical and Aerospace Engineering
Master of Science, October 2008
Email: romain.letor@supaero.fr



# **NASA Academy Research Project:**

Optical Communications with Precision Ranging Capability Principal Investigator: Jeffrey Livas, Code 663

#### **Academic and Research Experience**

- Ecole Nationale Supérieure de l'Aéronautique et de l'Espace (The French National University for Aeronautics and Space, also known as SUPAERO) Toulouse, France, Sept 2004 Present Bachelor of Science, Aeronautical and Aerospace Engineering; minor in Astrophysics, minor in Telecommunications and Meteorology/Oceanography, Jun 2006
  Master of Science, Aeronautical and Aerospace Engineering, minor in Space Systems Avionics, Oct 2008
- Lycée Chaptal Paris, France, Sept 2002 Jun 2004

  Special preparation in Math and Physics for competitive entrance examinations to French engineering universities ("Grandes Écoles")
- **SUPAERO Toulouse, France, Feb 2006 present** 3-meter radio telescope development to study 21cm spectral line of neutral hydrogen; relative velocity determination of galactic hydrogen clouds
- SUPAERO Toulouse, France, May Jun 2005 Establishment and comparison of Maxwell and Einstein equations, study of gravitoelectromagnetic approximation of General Relativity theory involved in NASA's Gravity Probe B program
- Lycée Chaptal / ONERA (The French Aerospace Research Center) Paris, France, Sept 2003 – Jun 2004 Modelling of fan noise in rotating machines and study of the benefit of swept and leaned stators

#### **Work Experience**

• Thales Avionics Electrical Motors S.A. – Conflans Sainte Honorine, France, Sept 2005

Training period as a worker in the manufacture of high quality electric motors for aeronautical applications

#### **Memberships and Activities**

 SUPAERO Astronomy Club member, 2004 – 2005, student-in-charge, 2005 – present: Organization of a study trip to Madrid for the annular eclipse of the Sun, 3<sup>rd</sup> Oct 2005

Renovation and modernization of the 11" telescope of the club Development of a partnership with other schools' astronomy clubs

• SUPAERO Association for Space, member, 2004 -- present

#### **Skills and Certifications**

- Computer Skills: Windows XP, Linux, Unix, JAVA, UML, C, C++, DELPHI, HTML, Graphset, LaTeX, MATLAB/Simulink, Maple, Eclipse, Catia V5, Microsoft Office, Adobe Premiere, Photoshop...
- Language Skills: French, English, German
- Flying: Training for the Private Pilot License VFR
- Skiing competition: "Flèche d'argent" level in giant slalom
- Initiation to first aid

#### **Honors and Awards**

• French Scientific Baccalauréat in Math and Physics, magna cum laude

#### **Hobbies and Interests**

Astronomy, radio astronomy or simply star gazing, flying, hiking, swimming, sailing, mountain biking, skiing, climbing, white-water sports, traveling, tennis, model rocketry, reading, photography, mineralogy, geology

#### Personal Statement

I was born and raised in the north-west suburbs of Paris, France, and I will never thank my parents enough for giving me a keen interest in everything. I found I had a passion for space when I was 6; during a dark and starry summer night, I was with my grandparents waiting for strange things called shooting stars. Since that time, I have gotten great pleasure out of learning, explaining or talking about stars, planets, satellites, exploration probes... I have never missed the opportunity to attend a lecture, watch a documentary concerning astrophysics or space missions, read the specialized press or practice astronomy in a club. This passion has always gone hand in hand with my attraction to physics and technology. I have always been fascinated by time and space through sci-fi books and movies I have read or watched. It has made me interested in modern physics theories such as the General Relativity and Quantum Physics.

Hard work, perseverance, passion and friendship have always been my driving forces that have propelled me through life to get closer to my dream of designing and carrying out space science mission projects for the benefit of all mankind. My motto is "Always shoot for the Moon, even if you miss it you will reach for the stars."



# Northern Arizona University

Flagstaff, AZ Physics and Astronomy Bachelor of Science, May 2007 Email: mtm43@nau.edu



# **NASA Academy Research Project:**

Impact Generated Electrical Currents and Magnetization in Rocks Principal Investigator: Peter Wasilewski, Code 691

#### **Academic and Research Experience**

- Northern Arizona University Flagstaff, AZ, August 2003 Present
  Bachelor of Science, Physics and Astronomy, May 2007; Minor,
  Mathematics, May 2007
- United States Geologic Survey Flagstaff, AZ, August 2005 May 2006
  - NASA Space Grant Intern, Galileo Observations of Volcanic Plumes on Io
- Los Alamos National Laboratory Los Alamos, NM, May 2005 August 2005
  - NASA Undergraduate Summer Research Program (USRP) Intern, Effects of grazing on grasslands
- National Solar Observatory Sunspot, NM, May 2004 August 2004
  - Research Experience for Undergraduates (REU) Intern, Accuracy of solar inversion codes
- Northern Arizona University Flagstaff, AZ, October 2003 May 2004
  - Undergraduate Research Assistant, Updating the "Large Catalog of Martian Impact Craters"

#### **Memberships and Activities**

- Episcopal Canterbury Fellowship (ECF), 2003 present
- ECF Student Leadership Board Vice President, 2005-2006
- Liberal Studies Honors Program, 2003 present
- Destination Imagination, 1997-2003, New Mexico State Champion Team, 2000, 2001
- FIRST Robotics Competition, 2002-2003
- NASA Fly High Program Flight Crew member, 2001

#### **Skills and Certifications**

- Computer Skills: Microsoft Office, Adobe Photoshop, UNIX and Windows operating systems
- Programming Experience: IDL, Matlab, FORTRAN
- CPR and First Aid Certifications

#### **Honors and Awards**

- Dean's List, Five Semesters
- Department of Physics and Astronomy Chair's Scholar, 2004
- Department of Physics and Astronomy Arthur & Catharine Adel Scholarship Recipient, 2005
- Department of Physics and Astronomy Katie's Gift Scholarship Recipient, 2005
- Northern Arizona University Catch a Dream Scholarship Recipient, 2003 present
- New Mexico Department of Education Robert C. Byrd Honors Scholarship Recipient, 2003 present

#### **Hobbies and Interests**

Reading (anything and everything), Running and swimming, Art (drawing and recently metal-smithing), Writing, Hiking and camping/backpacking

#### **Personal Statement**

"Hello and welcome to my personal statement. Our journey begins in the desert town of Las Cruces, NM where I grew up with my parents and younger brother. Cruising into the future, we find the formative and peculiar years of high school. You will note my interest in all sciences but particularly the dream to become an astronaut (yes, I missed the phase in kindergarten when everyone dreamed of being a spaceman and have been making up for lost time ever since). Continuing on, we make a jump to northern Arizona, in particular the bohemian town of Flagstaff. Here the dream of space continues with my study of Physics and Astronomy. Looking closely you will notice the crazy and beautiful assortment of close friends made through participating in the on-campus Episcopal group known as Canterbury. This is the end of the journey so far, and we thank you for flying with us today. Please join us again to see if this kindergartener-at-heart will make it to the stars."



# **Princeton University**

Princeton, NJ
Mechanical and Aerospace Engineering
Engineering Biology Minor
Bachelor of Science in Engineering, June 2007
Email: fmycroft@princeton.edu



# **NASA Academy Research Project:**

Develop the mission trajectory for the Lunar Reconnaissance Orbiter Principal Investigator: Mark Beckman, Code 595

#### **Academic and Research Experience**

- Program Manager, Student Satellite Design Team, Princeton University, Spring 2006
   Develop through Phase B a low cost, LEO satellite for global tracking of 50+ gram migratory birds and mammals.
- Boeing Fellow, NASA Terrestrial Planet Finder Laboratory,
   Princeton University, Summer 2005
   Optimized fiber optic light coupling, analyzed spectroscopic measurements, and assisted in developing interface technology for phase-correcting deformable mirrors to be used on the space telescope, TPF-Coronagraph, to correct for aberrations in the system's optics.
- Trainee, NASA Spaceflight and Life Sciences Training Program, Kennedy Space Center, Sum. 2005

  Developed a method for in-situ monitoring of plant stress using bioluminescence for use during long-duration space missions.
- Ecological Field Researcher, Richmond Field Station, Univ. of California, Berkeley, Summer 2004

  Evaluated the effects of vegetative cover density on runway populations of the threatened California vole.

#### **Publications**

- S. Gusev, F. H. Mycroft, L. Yang, E.N. Esimbekova, N. N. Remmel, V.A. Kratasyuk. Bioluminescent Biosensors for Space Biotechnology. Ninth World Congress on Biosensors. Toronto, Canada (2006).
- R. Belikov, J. Beal, M. Carr, J. Kay, T. Kolade, M. Littman, F. Mycroft, L. Pueyo, B. Vanderbei, J. Kasdin. Demonstration of High Contrast in a Shaped-Pupil Coronagraph. IAUC 200: Direct Imaging of Exoplanets, Nice, France (2005).

• F. H. Mycroft & V. A. Kratasyuk. Monitoring Plant Stress with Bioluminescent Biosensors. American Society for Gravitational and Space Biology, Reno, NV (2005).

#### **Work Experience**

- Math Tutor, Freshman Scholars Institute, Princeton University, Fall 2005 - Calculus and advanced calculus instruction for incoming freshmen undergraduates
- Sales Associate, Office Max, Walnut Creek, CA, Summer 2004

#### **Memberships and Activities**

- President, American Institute of Aeronautics and Astronautics, Princeton Chapter, March '06 Present
- Board Member, Princeton U. Engineering Council, 2004 2006
- Princeton Astrobiology Club, Spring '05 Present
- American Society for Gravitational and Space Biology, '05 Present
- American Society of Mechanical Engineers, Fall '05 Present
- Boy Scouts of America, lifetime member

#### **Skills and Certifications**

- Computer Skills: JAVA, Pro-E, Excel, MATLAB, LabVIEW, STK, LaTeX
- Language Skills: Capable of butchering the French language
- Private Pilot, FAA Certified; pursuing commercial pilot license

#### **Honors and Awards**

- Tau Beta Pi Engineering Honor Society, New Jersey Delta Chapter
- Certificate of Outstanding Academic Achievement, three-time recipient, Princeton Engineering School
- Eagle Scout Award, Boy Scouts of America, Fall 2002

#### **Hobbies and Interests**

Backpacking, casual star gazing, juggling, reading fiction, campfires, writing, flying, beaches, national parks, dim sum, and day dreaming.

#### **Personal Statement**

Friends occasionally ask me, "Why space?" Why should they care? Why throw money to the stars when so much suffering and so many problems exist here at home? On a certain level, I cannot argue with the truth in their reasoning. But at the very least, I will ask them: "Do you ever imagine seeing the Earth rise, the whole of everything we are, little more than a blue jewel in the sky? Or, can you imagine life on other worlds, circling distant stars or perhaps closer to home, beneath Europa's scar-like slashes and reddish-brown ice? Have you ever considered how strange gravity really is? Or time? Or dimension?" These most fundamental aspects of our nature, and we know nothing of why they are. The answers are out *there*. In my opinion, there are worse things to spend money on.



## University of Missouri-Columbia

Columbia, MO

Mechanical & Aerospace Engineering Bachelor of Science, May 2006

Email: bmrqk3@mizzou.edu



# **NASA Academy Research Project:**

Systems Engineering Generic Process Improvement Principal Investigator: Maria So, Code 599.0

#### **Academic and Research Experience**

- Bachelor of Science, University of Missouri, Columbia Columbia, MO, Aug 2002 May 2006
  - Major: Mechanical & Aerospace Engineering, Minors: Spanish and Mathematics, May 2006
- Honors Undergraduate Research, University of Missouri, Columbia
   Columbia, MO, Aug 2005-Apr 2006 Trajectory Analysis of an Electro-Magnetic Orbital Launch System

#### **Work Experience**

- Student Facilitator for Department of Experiential Education Columbia, MO July 2005-May 2006
- Student Coordinator for University of Missouri Freshman Orientation Program – Columbia, MO July 2004-July 2005
- Student Leader for University of Missouri Freshman Orientation Program – Columbia, MO Feb 2004-July 2004
- Athletic Department Tutor in Physics, Mathematics, Spanish Columbia, MO Feb 2003-May 2004
- Corn pollinator/detasseler Des Moines, IA Jun 2003-Aug 2003
- Wait staff, Wakonda Country Club Des Moines, IA May 2002-Sept 2002

- QEBH Honor Society, Historian, 2005-Present
- Tau Beta Pi National Engineering Honor Society, Vice President, 2003-Present
- St. Patrick's Board Engineers' Club Committee Chair, 2005-2006
- Study Abroad participant in Cuernavaca, MX, 2003
- Missouri Students Association Senator, Student Fee Review Committee Vice-Chair, 2002-2004

Student Health Advisory Council, Vice President, 2003-2006

#### **Skills and Certifications**

- Computer Skills: Microsoft Office, Adobe Photoshop, Matlab/Simulink, Fluent, AutoCAD, XHTML
- Language Skills: English and Spanish
- First Aid and CPR certified

#### **Honors and Awards**

- College of Engineering Dean's High Honor Roll, each semester, Fall 2002-Spring 2006
- Recipient of Ketcham Engineering Scholarship Fall 2005-Spring 2006
- Mizzou 39 Senior Honorary Recipient, 2006
- NASA Missouri Space Grant Consortium Researcher, Fall 2005-Spring 2006
- National Merit Scholarship, 2002-Present

#### **Hobbies and Interests**

Running, Playing basketball and street hockey, Reading novels, Painting, Space exploration

#### **Personal Statement**

"I grew up in Des Moines, IA and I was always curious about the way things work and building anything I could out of anything I could find. Science and engineering have been my academic passions because I love discovering things and designing solutions to complex problems. I have always been driven by my desire to learn and to excel in any endeavor I undertake. The NASA Academy is an unbelievable opportunity for me to see what it is like to work in the best engineering environment in the world. I cannot wait to be a part of a team working toward accomplishing challenging goals."



## **University of Maryland**

College Park, MD
Aerospace Engineering and Physics
Bachelor of Arts, May 2006
Bachelor of Science, May 2008
Email: trussel5@umd.edu



## **NASA Academy Research Project:**

James Webb Space Telescope ground operations team Principal Investigator: Jonathan Gal-Edd, Code 581

#### **Academic Experience**

- University of Maryland -College Park, MD, Aug 2005 Present Bachelor of Science, Aerospace Engineering, May 2008
- College of Notre Dame of Maryland Baltimore, MD, Aug 2002 May 2005
   Bachelor of Arts, Physics, May 2006

#### **Work Experience**

- Shuttle UM Driver (training)
- Physics Laboratory Assistant
- Annual Fund Caller for the College of Notre Dame of Maryland
- Key Sales Associate for Educate and Celebrate

### **Memberships and Activities**

- Newly elected Secretary of the College Park Environmental Group (CPEG)
- Member of the National Society of Black Engineers
- Member of the Black Engineers Society
- Member of Kappa Mu Epsilon
- Member of Notre Dame Tennis Team, Spring 2005
- Historian for 2006 Notre Dame Advisory Board, Fall 2003-Spring 2005
- President, Treasurer, and Member of Notre Dame Dance Team, Fall 2002 – Spring 2005

### **Skills and Certifications**

• Computer Skills: Microsoft Office, Internet savvy, MATLAB, C++, FORTRAN, Mathematica

## **Honors and Awards**

- Presidential Transfer Award, Summer 2006
- Dean's List, Two semesters, Notre Dame
- Physics Departmental Award, Spring 2005
- Hansen Endowed Scholarship, Fall 2002-Spring 2005
- National Dean's List, Summer 2004
- Kappu Mu Epsilon Mathematics Honor Society Induction, Spring 2003
- National Honors Society, Patuxent High School Chapter, Fall 2001

#### **Hobbies and Interests**

Singing, trying out new things, recycling, stream cleanups, dancing, foster care/adoption, hanging out with my family, reading anything by Julia Quinn, driving, music, black holes

#### **Personal Statement**

"Working within the space field and pushing the limits on human boundaries has been my motivation through out the past few years of being in school. I am completely thrilled and honored to be given the opportunity to work for NASA. Ever since my visit to the Kennedy Space Center and watching the IMAX movie about the self-sustaining space station when I was 12, I have made it a goal in my life to be involved in a project that allows humans to live and thrive outside of Earth. I was told in high school that I should choose a profession not based on how easy it is, but on whether I will work hard to be successful. I have always enjoyed challenges and pushing myself to do activities that I would have never thought of doing. I may not be the next Einstein but you will not find someone as motivated, optimistic, and excited about being apart of the next generation of NASA as I am."



## **University of Wyoming**

Albin, Wyoming Electrical Engineering

Bachelor of Science, December 2007

Email: jsand@uwyo.edu



## **NASA Academy Research Project:**

Investigation of Magnetospheric Radio-Sounder-Stimulated Plasma Resonances

Principal Investigator: Robert Benson, Code 612.2

#### **Academic and Research Experience**

- University of Wyoming Laramie, WY, Aug 2003 Present Bachelor of Science, Electrical Engineering, December 2007
- University of Central Florida College of Optics & Photonics Orlando, FL, May August 2005 Student Researcher: Awarded
  funding through NSF Research Experience for Undergraduates (REU);
  Designed and built working wavefront sensor to aid graduate research
  Participated in group discussions and presentations
- University of Wyoming College of Engineering Laramie, WY,
   May August 2003 Student Researcher: Awarded funding through
   NSF EPSCoR (Experimental Program to Stimulate Competitive
   Research); Designed and built an adjustable maze for microprocessing
   class; Designed multiple devices of need for disabled

#### **Work Experience**

- Counselor for Engineering Summer Program (ESP) at the University of Wyoming
- Peer Assistant Introduction to Engineering Science Class at the University of Wyoming
- Farm labor on my Family's Wheat Farm

#### **Memberships and Activities**

- Tau Beta Pi Vice President of Annual Engineering Honors Banquet, November 2005-current
- Panhellenic Executive Council, 2005
- Vice President IEEE Student Branch, 2005
- SPURS Sophomore Honorary, Fall 2004-Spring 2005
- National Anthem soloist for UW varsity volleyball, Fall 2005
- 5k Fun Run "Always a Cowboy" Fundraiser, Spring 2004
- IEEE Student Branch Member, Fall 2003-current

- Delta Delta Sorority, 2003-current
- Cheyenne Astronomical Society, 1996-current

#### **Skills and Certifications**

- Computer Skills: Microsoft Office, C++ Programming, LabView, DreamWeaver
- Musical Skills: National Piano-Playing Audition Guild Diploma Superior Rating, 2003

#### **Honors and Awards**

- President's Honor Roll, Spring 2005
- Dean's Honor Roll, Fall 2003-Spring 2004, Fall 2005
- UW Gold Finalist Academic and Service Award (replaced homecoming royalty), Fall 2005
- Phi Kappa Phi National Honor Society, Fall 2005 current
- Usher for College of Engineering Commencement, Fall 2004, Spring 2005, Fall 2005
- Scholar Athlete Milk Mustache of the Year (sponsored by USA Today and Milk Council) 1 of 25 national winners, 2003
- P.O. Pistilli Engineering Scholarship (1 of 2 national winners), 2003

#### **Hobbies and Interests**

Stargazing and learning about astronomy, reading science and astronomy magazines (i.e. Science News, Discover, Astronomy), running/jogging, playing piano, singing, music, crocheting, arts/crafts

#### Personal Statement

Theodore Von Kármán stated, 'Scientists discover the world that exists; engineers create the world that never was.' The mysteries of science are fascinating to me, and I look forward to being part of the NASA engineering team creating the new world of space technology. My goal is to become a development engineer in the space program; by participating in the 2006 NASA-Goddard Academy, I will be headed toward this goal. My interest in spacecraft and astronomy has been evident throughout my life. I have been a member of the Cheyenne Astronomical Society since a very young age, and my aunt and uncle, amateur astronomers, motivate and guide me in my search for knowledge of the cosmos. At the National Youth Science Camp, my peer group obtained and analyzed data from the Robert C. Byrd Green Bank Telescope. Watching the launch of Space Shuttle Discovery from nearby Cocoa Beach and touring both Johnson and Kennedy Space Centers further captivated me. In addition to my interest in the space program, I also have a unique background that would benefit any team dynamic. I grew up on a wheat farm in a sparsely populated area and can offer my individuality, unique way of thinking, and teamwork skills to any project assigned. I look forward to addressing my interest regarding advancements in spacecraft and living by the words of my favorite quote.



# **Saint Louis University**

Saint Louis, MO Aerospace Engineering Bachelor of Science, May 2006 Email: lucas.k.smith@gmail.com



## **NASA Academy Research Project:**

James Webb Space Telescope, ISIM Flight Software Principal Investigator: Lisa Shears, Code 582

#### **Academic Experience**

• Saint Louis University – Saint Louis, MO, Aug 2002 – May 2006

Bachelor of Science, Aerospace Engineering, May 2006

#### **Work Experience**

- Student Engineering Lead Saint Louis University, CubeSat Project Founded an undergraduate satellite program with 30+ students currently participating; designed a satellite attitude determination and control system; performed project and budget management duties
- Field and Computer Technician Saint Louis University, Facilities Planning

Verified the utilization of all existing building space on SLU's campus

• Engineering Intern – Saint Louis University, Facilities Services
Integrated utility line locations for the entire campus onto existing
blueprints; collaborated with University officials and local utility
engineers to execute project goals

## **Memberships and Activities**

- Alpha Phi Omega performed community service, held various leadership positions, and conducted leadership workshops
- American Institute of Aeronautics and Astronautics Brought technical speakers to campus, President (Fall 2005 Spring 2006)
- Association of Parks College Students Governing body for engineering students
- National Space Society Student Member (Winter 2005 Present)
- Society of Automotive Engineers Designed & constructed unmanned planes for competition
- St. Louis Science Center, McDonnell Planetarium Initiated a partnership where 7 aerospace students volunteered on a weekly basis, provided flying lessons to visitors (using flight simulators)

 Students for the Exploration and Development of Space – Organized the first SLU delegation to attend the SEDS National Conference, Vice President & Co-Founder of SLU Chapter (Fall 2005 – Spring 2006)

#### **Skills and Certifications**

- Computer Skills: AutoCAD, C++, Mathcad, MATLAB / Simulink, MS Office, Pro Engineer; Pro Mechanica, Red Hat Linux, Satellite Tool Kit (STK 6.0), Windows 98 XP
- Language Skills: Knowledge of Spanish
- Machining / Fabrication Skills: Carbon composite assembly, band saw, mill, drill press, lathe
- Other: PADI Open Water Diver Certification

#### **Honors and Awards**

- SLU Vision Tuition Scholarship (2002 2006)
- SLU University Scholarship

#### **Hobbies and Interests**

Space, Distance Running, Lifting Weights, Reading, Philosophy, Politics / Policy, R/C Planes, Outdoor Activities & Sports, Traveling, SCUBA Diving, Listening to new types of music, Learning Guitar & Piano

#### Personal Statement

"My love for the space program was born as I watched Astronaut John Glenn take off on STS-95 during my freshman year of high school. That launch inspired me to appreciate the higher calling of the space program and man's attempt to reach for the stars. Since high school, I have become passionate about challenging myself with large goals, such as working in the space program and training to become a competitive distance runner. In the short term, my goals include obtaining a pilot's license, training to run a competitive marathon, and applying to a challenging graduate school. Further down the road, I intend to play a meaningful role in the space program, write a book, and learn various musical instruments. I look forward to the next stage of my life with great anticipation and high expectations."



## University of Florida

Gainesville, Florida Aerospace and Mechanical Engineering Minor Biomechanics Bachelor of Science, May 2007

Email: dvanegas@ufl.edu



## **NASA Academy Research Project:**

Fusion of Multiple Source Remotely Sensed Data Principal Investigator: Jacqueline LeMoigne, Code 588

#### **Academic Experience**

• University of Florida -Gainesville, FL, May 2004 – Present
Bachelor of Science, Aerospace and Mechanical Engineering, Minor
In Biomechanics, May 2007

#### **Work Experience**

- University of Florida Undergraduate Research. Hydrogen leakage detection on space vehicles.
- University of Florida Undergraduate Research. Acoustics modeling for breast cancer Imaging
- Miami Dade College Mathematics' Department Teacher Assistant.
- Astrodynamics and Mathematics Tutor

#### **Memberships and Activities**

- Golden Key International Honour Society member UF Chapter, 2005-2006
- AIAA American Institute of Aeronautics and Astronautics, Student Member, 2004-Present
- MAES Society of Mexican American Engineers and Scientists
- SWE-Society of Women Engineers 2006-Present
- Air Force Reserve Officer Training Corp, Spring 2006 Present
- Board of Directors, Florida Engineering Society, Fall 2002-2004
- National Honor Society Phi Theta Kappa, Fall 2002 2004
- Student Government President,1999-2000
- Small Satellite Design Club member 2006-Present

#### **Skills and Certifications**

- Computer Skills: Microsoft Office, Astrogator, Matlab, C++, ProE
- Language Skills: Bilingual in Spanish and English

#### **Honors and Awards**

- Scholarship: Henry Bauch: For UF Aerospace and Mechanical Engineers, Fall 2005-Spring 2006
- Dean's List: University of Florida 2005
   Miami Dade College, Fall 2000-Spring 2004
- The National Dean's List, University of Florida, Fall 2005
- Scholarship: National Science Foundation For Mathematician and Science Engineers, 2003- 2004
- Scholarship: FGAMP for Engineers, Spring 2003
- Hispanic College Fund Scholarship, Spring 2003-Fall 2004

#### **Hobbies and Interests**

Flying, Reading, Drawing, Painting, Cooking, Swimming, Jogging, Dancing, Reading about Astrodynamics, Space Science, and Aircraft's flight mechanics.

#### **Personal Statement**

I left Colombia with the dream of becoming an Astronaut. In my plans, my first step was to learn English; Then graduate from a recognize university as an Aerospace Engineering, and then find my path towards NASA to become an Astronaut. Today, as I write this paragraph, I still can not believe that I can finally say "I am going to work in NASA this summer". This has been the greatest gift life can give me. Thank you!



# **Cornell University**

Ithaca, NY Astronomy Ph.D., May 2011

Email: <a href="mailto:jwray@princeton.edu">jwray@princeton.edu</a>



## **NASA Academy Research Project:**

Bias Filters for Low-Background Sensor Applications Principal Investigator: Edward Wollack, Code 665

### **Academic and Research Experience**

- Cornell University Ithaca, NY, Aug 2006 May 2011 Ph.D. in Astronomy; minor: Geology; Advisor: Steve Squyres
- Princeton University Princeton, NJ, Sep 2002 Jun 2006
   B.A. in Astrophysics; minor: Engineering Physics; Senior Thesis: collection and analysis of high-dispersion spectra of Europa and Enceladus using APO 3.5-meter telescope
- Wavefront Measurement for Deformable Mirror Control, Princeton University, Feb – May 06 Developed and tested system for measuring wavefront phase aberrations for adaptive optics systems
- NSF REU at the Institute for Astronomy, University of Hawaii Honolulu, HI, May Aug 05 Identified candidate planet-forming dust disks around low-mass stars
- REU, Princeton University Astrophysics Department, May Sep 04
  Developed new technique for finding photometric redshifts of galaxies in the Sloan Digital Sky Survey
- REU, Princeton University Astrophysics Department, May Sep 03
  Discovered and studied new class of semi-regular red giant variable stars in Galactic bulge

#### **Publications**

- J. J. Wray, et al. "The Shape, Multiplicity, and Evolution of Superclusters in LambdaCDM Cosmology." Submitted to <u>The</u> <u>Astrophysical Journal</u>. (preprint: <a href="http://arxiv.org/astro-ph/0603060">http://arxiv.org/astro-ph/0603060</a>)
- J. J. Wray, M. C. Liu, and I. N. Reid. "New Debris Disks Around Low-Mass Stars." <u>Bulletin of the American Astronomical Society</u> 37 (2005): 1166-1167.
- J. J. Wray, L. Eyer, and B. Paczynski. "OGLE small-amplitude variables in the Galactic bar." <u>Monthly Notices of the Royal</u> <u>Astronomical Society</u> 349 (2004): 1059-1068.

#### **Work Experience**

- Teaching Assistant for AST 203: "The Universe," Princeton University, Feb May 05
- Web Designer, Princeton University Geosciences Department, Fall
   03 Spring 05 Designed Princeton's first astrobiology website, http://deepbio.princeton.edu

### **Memberships and Activities**

- Sigma Xi, Associate Member, May 05 Present
- Princeton Astrobiology Club, Events Coordinator, Feb 05 May 06
- Princeton Society of Physics Students, Member, Oct 03 May 06
- Princeton Optical SETI program, Observer, Sep 02 May 04
- Princeton University Lightweight Crew, Coxswain, Sep 02 May 03

#### **Skills and Certifications**

- Computer Skills: IDL, C/C++, IRAF, Perl, LaTeX, SM, Mathematica, MATLAB, HTML, Java, BASIC, Microsoft Office, UNIX/Linux
- Telescope observations at Keck 2, Caltech Submillimeter, Apache Point 3.5-meter and Princeton's FitzRandolph 0.9-meter using the following: NIR Camera, heterodyne receivers, Echelle spectrograph

### **Honors and Awards**

- Fannie & John Hertz Foundation Fellowship, 2006 2008
- NSF Graduate Research Fellowship, reserved for 2008 2011
- Third Prize, <u>Atlas Shrugged</u> Essay Contest, 2005
- National Merit Scholar, 2002
- The Star-Ledger Scholar for Middlesex County, NJ, 2002 2006
- Robert C. Byrd Honors Scholar, 2002 2006
- Edward J. Bloustein Distinguished Scholar, 2002 2006

### **Hobbies and Interests**

Manned spaceflight, amateur astronomy, philosophy, literature, travel, running, swimming, sky diving, Microsoft Flight Simulator

### **Personal Statement**

"I am interested in the search for life in the Universe and exploration of the planets. I have always been attracted by astrobiology and planetary science's interdisciplinary nature, integrating physics, astronomy, geology, chemistry, biology and engineering. I will begin my Ph.D. research at Cornell University in the fall of 2006, working with Steve Squyres (PI on the Mars Exploration Rovers) to study Martian geomorphology at unprecedented resolution using the Mars Reconnaissance Orbiter's HiRISE instrument. Having lived near Princeton since age three, I look forward to my upcoming change of scenery and to having an apartment that allows pets again (probably a cat and a dog). I anticipate skiing and pursuing SCUBA certification and a pilot's license, as time and money allow."



The NASA Goddard Academy is administered and operated within the GSFC Office of Higher Education.

### Chief, Office of Higher Education- Dr. Vigdor L. Teplitz

Dr. Teplitz directs the Office of Higher Education and other programs offered by the Office. He joined Goddard at the beginning of 2003 on a three-year leave of absence from the Physics Department of Southern Methodist University. His previous experience includes academic appointments at MIT and Virginia Tech, 12 years in the U.S. Arms Control and Disarmament Agency, and two years in the White House Science Office. His research is in elementary particle theory, primarily at its border with astrophysics and cosmology.

#### Co-Director, Office of Higher Education- Dr. Richard P. Fahey

Dr. Fahey serves as Deputy Chief of the Office of Higher Education. Prior to Dr. Teplitz's arrival, he led the Office of Higher Education as Acting Director for several years both before and after Jerry Soffen's death. For the past three decades, he has been developing methods of presenting aspects of relativity and quantum theory to specialist and non-specialist audiences. During that time, he has taught courses in physics, astronomy, relativity and cosmology, aerospace engineering, and the philosophy of nature. Dr. Fahey currently conducts research in cosmology and gravitational wave detection at GSFC. He is also the Naval Space Command Research Chair at the U.S. Naval Academy in Annapolis.

### Program Director - Mr. David Rosage

Mr. Rosage (ME) has served NASA in various technical roles between 1980 and 2000, and as Director/Program Manager of the Academy since 2000. Besides managing the NASA Academy Program for Goddard, he is responsible for short and long-term program improvements, expansion of the Academy to other NASA centers, enabling international participants, and increasing Academy alumni involvement and their awareness to the NASA community.

## Dean of Academic Affairs - Dr. Joseph Di Rienzi

Joseph Di Rienzi is a Professor of Physics at the College of Notre Dame in Maryland and a Visiting Scientist at NASA/Goddard Space Flight Center's Laboratory of Astronomy and Solar Physics. Dr. Di Rienzi received his Ph.D. in Physics form the Polytechnic Institute of New York and his B.S. from Brooklyn Polytechnic Institute. His research interests are in theoretical physics, in particular atomic physics and the foundations of quantum mechanics. He works at Goddard with Dr. Richard Drachman on

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theoretical modeling of matter-antimatter reactions, and currently they are investigating the scattering of positronium with helium. Dr. Di Rienzi has had a long association with the NASA Academy. He served under Dr. Soffen as the original Dean in 1993 and 1994. He returned again as the Dean in 1999 and has remained in that position since 2004. Dr. Di Rienzi is a long time member of the Selection Committee, and he is very excited to be part of this year's Academic Staff.

### Operations Manager - Ms. Natacha G. Chough

Natacha was in the 2000 NASA Academy at Ames Research Center and staff in 2001. After graduating from the University of Washington in 2001 with a B.S. in Cell & Molecular Biology, she worked at the Jet Propulsion Laboratory, performing Planetary Protection on the Mars Exploration Rovers and supporting their launch preparations at Kennedy Space Center. From 2003 to 2005, Natacha taught health and science as a Peace Corps Volunteer in Turkmenistan. This fall, she will begin medical school at the University of Michigan, planning to specialize in aerospace medicine and serve as a NASA flight surgeon. Natacha is an avid skier and also enjoys running, hiking, traveling, adventure relays, SCUBA diving and skydiving.

#### Logistics Manager -Mr. Abraham T. Grindle

Abe is an alumnus of the 2005 NASA Academy at Goddard. Born and raised in the small town of Bucksport, Maine, his eyes have been drawn to the stars since childhood. Abe graduated from Parks College of Saint Louis University in May of 2006 with an Honors Bachelor of Science degree in Aerospace Engineering. During his undergraduate years, Abe spent more than 16 months working at various NASA centers; he was a Co-op at Kennedy Space Center from January through August in 2003, a Co-op at the Jet Propulsion Laboratory from January through August of 2004, and finally a NASA Academy Research Associate at GSFC from June through August of 2005. After staffing the Goddard Academy this summer, Abe will spend a year serving with the Jesuit Volunteer Corps at St. Labre's School in rural Ashland, Montana, working with Native American children and exploring his interests in social justice and the outdoors. Following this experience, Abe will continue his education at the Massachusetts Institute of Technology, pursuing dual Master of Science degrees in Technology & Policy and Aeronautics & Astronautics.

## Program and IT Support - Mr. Johnny Erickson

Johnny has a B.S. in Computer Science and is the co-founder of a software design company. A pillar of the 2002 and 2003 Goddard Academy, Johnny is an enthusiastic and devoted supporter of the Academy and its alumni.

In the operation of the NASA Academy, Natacha, Abe and Johnny will provide general assistance and logistics coordination. Natacha and Abe will reside full time at the Academy House and will be available as facilitators in relevant program activities.

#### Academy Alumni Coordinator - Ms. Laura Burns

Ms. Burns is an alumna of the 1996 Academy at the Marshall Space Flight Center and current President of the NAAA, as well as having served as its Alumni Coordinator since 2000. She currently works at GSFC supporting the James Webb Space Telescope (JWST). As the Alumni Coordinator, Laura informs, recruits, and coordinates alumni participation in all Academy extracurricular activities.

#### Special Assistant for Operations - Mrs. Mary Floyd

Mrs. Floyd provides support for housing, meals, transportation, and lodging on field trips, and distribution of the Academy participants' financial reimbursements.

Together with the designated Academy staff listed above, the Academy participants are expected to be actively involved in the affairs of the Academy, assuring its day-to-day success.

All the members of the Office of Higher Education will be pleased to grant any assistance and support needed.

Links



• NASA Academy:

http://www.nasa-academy.nasa.gov/

• NASA Academy Alumni Association:

http://www.nasa-academy.org/

• NASA Agency:

http://www.nasa.gov

• International Space University:

http://www.isunet.edu

• The Soffen Memorial Fund:

http://www.nasa-academy.org/soffen/donors.html

• Goddard Space Flight Center:

http://www.gsfc.nasa.gov/

• Goddard Space Flight Center's Mission:

http://www.gsfc.nasa.gov/about mission.html